

**FAA SPILL PREVENTION, CONTROL AND  
COUNTERMEASURES (SPCC) PLAN GUIDANCE**

**Federal Aviation Administration  
Office of Environment and Energy  
Environment, Energy and Employee Safety Division, AEE-200**

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## 1.0 Introduction

Spills of oils, related petroleum products (gasoline), and other hazardous substances into surface waters, sanitary sewer systems or storm sewer systems present potentially serious environmental and human health hazards that must be prevented and controlled. In the event that spills occur, timely and efficient countermeasures must be initiated to contain and recover these substances in order to mitigate adverse effects to surface waters and to prevent migration through subsurface soils to groundwater supplies.

The US Congress initially set up the legislative framework to address oil spill events with the 1970 Water Quality Improvement Act, which established reporting obligations and a prohibition on the discharge of harmful quantities of oil (i.e., those which caused a sheen on the water). With the passage of the Federal Water Pollution Control Act of 1972, more commonly known as the Clean Water Act (CWA), the 1970 Water Quality Improvement Act was updated and restrictions on the discharge of hazardous substances were added. In 1990, Congress passed the Oil Pollution Act (OPA) in response to the Exxon *Valdez* spill in the Prince William Sound in 1989. The OPA, in part, amended the CWA by strengthening the oil spill provisions to include more stringent reporting and cleanup requirements and more severe penalties for discharges.

The Environmental Protection Agency (EPA) and the United States Coast Guard (USCG) are the two main Federal agencies, which address and regulate facilities that handle, transfer and store oil and petroleum products. Both agencies have promulgated certain requirements, which when appropriately implemented by facilities, enable the facilities to prevent, control, respond, and mitigate discharges.

FAA facilities use and store a wide range of volumes of oil and petroleum products in a variety of container types. FAA must identify which FAA facilities are subject to EPA Spill Prevention, Control, and Countermeasures (SPCC) requirements. These requirements were recently amended in 67 FR 47041 and originally codified in 40 CFR 112. Oil includes synthetic oils, mineral oils, vegetable oils, animal fats, and petroleum derivatives. In addition, FAA has some facilities that store significant quantities of oil (i.e., over 40,000 gallons) and/or transfer fuel over water (i.e., facilities located on islands where the fuel is delivered to the facility by barge or other vessel). As such, FAA must identify which facilities are subject to EPA and/or USCG Facility Response Plan (FRP) requirements (and other USCG requirements as applicable).

The purpose of this document is to clarify the requirements and assist FAA Headquarters, Regional, SMO, and Facility Environmental personnel to:

- ☞ Determine the applicability of ***Federal*** EPA and USCG oil spill regulations based on facility operations and considerations; and
- ☞ Comply with the requirement to develop SPCC plans.

Chart 1-1, on the following page, provides a discussion of significant regulatory changes or issues that may impact FAA facilities in updating previously-developed SPCC Plans.

## CHART 1-1

### Significant SPCC Changes Potentially Impacting FAA Facilities

#### 1. **Aggregate Threshold Capacity Determination -**

- The individual 660 gallon threshold was removed.
- There is a new de minimus container size of 55 gallons (only containers/equipment, which contain 55 gallons of oil or more are counted).
- **“Use of Oil” is included in the regulations under §112.1(b).** This means that oil-containing operational equipment, which contains 55 gallons or more must now be included in a facility’s threshold determination. This includes electrical equipment (such as oil-containing transformers), hydraulic equipment, and manufacturing equipment.
- The SPCC regulation’s definition of “completely buried tank” (i.e., any container completely below grade and covered with earth, sand, gravel, asphalt, or other materials) does not equate to the definition of “UST” from the 40 CFR 280 regulations.
- Underground Storage Tanks (USTs) covered under 40 CFR 280 that are only partially subject to all of the Federal UST technical requirements or that are only partially subject to state UST program requirements are included in the threshold determination. (For example, UTSs that store fuel solely for use by emergency generators and USTs between 55 gallon and 500 gallons.)

#### 2. **Maintaining SPCC Plan Onsite -** Change in what qualifies as an “attended” or “manned” facility from 8 hrs. to 4 hrs. per day. SPCC Plan must be onsite if “attended” at least four hours per day.

#### 3. **Certification by Licensed Professional Engineer -** The items that a licensed Professional Engineer has to attest to have been expanded, including (but not limited to) a requirement that “he or his agent has visited and examined the facility.”

#### 4. **Review and Evaluation of Plan -**

- Changed from 3 years to 5 years.
- Documentation of each review and evaluation of plan is now required. This includes documentation of the completion of review and evaluation, a statement as to whether to amend plan, signature, and date.
- A variety of changes at a facility now require a technical amendment of an SPCC plan and signoff by a licensed engineer. EPA has provided examples in the regulations and there is a discussion in the Final Rule’s Preamble regarding which changes require signoff of the SPCC Plan by licensed engineer. These can include just a change in product (such as from one petroleum substance to another petroleum substance or revision of maintenance procedures).
- New non-technical/administrative amendments do not require a licensed engineer signoff.

#### 5. **New Requirement for a Discussion of Conformance with 40 CFR 112 and Any More Stringent State Requirements -** Under 40 CFR 112.7(a)(1) and §40 CFR 112.7(j), a facility is required to provide a discussion in the SPCC plan describing the facility’s conformation with 40 CFR 112 requirements and any more stringent state/local requirements.

#### 6. **Bulk Storage Containers -** EPA specifically defines bulk storage container because there is a complete regulatory section, §112.8(c) that contains additional requirements for these containers.

- **What is or is not a bulk storage container?**
  - EPA has defined bulk storage container to exclude oil-filled transformers. However, FAA “day tank” containers with a capacity of 55 gallons or more and recycled oil collection containers with a capacity of 55 gallons or more fall under the definition of bulk storage container. As such, the additional requirements of §112.8(c) apply to these.
- **Requirements under §112.8(c) which are “new” to FAA facilities.**
  - A facility must have the ability to contain on-site any potential catastrophic loading/unloading discharges to each bulk storage container present at the facility. (*See additional discussion of this issue under number 7 below.*)
  - Integrity testing - two different kinds are required (visual and another testing technique); written testing procedures are required.
  - Alarm devices/systems - requirement for each bulk storage container to have one of the four types of alarm device/system stated in the regulations. This would require “day tank” containers and recycled oil collection containers that have a capacity of 55 gallons or more to each have an alarm device/system.
  - Mobile or portable oil storage containers - FAA’s recycled oil collection tanks may be considered mobile or portable, and be subject to additional requirements.
- **Additional requirements under §112.8(c), if a facility has any of the following:**
  - diked areas
  - buried tanks
  - heating coils
  - effluent treatment systems

7. **Containment of Potential Catastrophic Loading/Unloading Discharges to Each Bulk Storage Container, as well as From Any Piping, Equipment, or Device in Undiked Areas -** Several sections in the regulations require that an owner/operator “provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b)” [which refers one to 40 CFR 110 - discharge of oil in quantities that may be harmful, which includes causing a sheen]. EPA allows the option of complying with 40 CFR 109’s contingency plan requirement, but this option is very cumbersome and not cost effective for FAA facilities. Instead, a more feasible way to approach the requirement may be via a spill diversion berm/catch basin for the facility. A spill diversion berm/catch basin must be constructed to contain the largest volume of a potential catastrophic discharge from an oil delivery or recycled oil pickup tank truck, as well as the volume to meet the criteria “sufficient freeboard to contain precipitation.” [*Note: This statement assumes that an oil delivery or recycled oil pickup tank truck will have a larger volume than any other bulk storage container at the facility.*]

There are other requirements within 40 CFR 112, such as §112.1(b) and §112.8(c), that are applicable (whether or not the facility is subject to §112.7(h), and must be addressed regarding loading/unloading discharges and mobile/portable tanks, piping, etc. that are not in diked areas.

8. **Written Procedures for Inspections and Tests -** All inspections and tests required by 40 CFR 112 must be conducted according to written procedures developed for the facility. Industry standards can be used, but must be reviewed to ensure that the standards cover the various inspection, testing, and recordkeeping requirements. If they do not, additional written procedures need to be adopted to cover any gaps.
9. **Records**

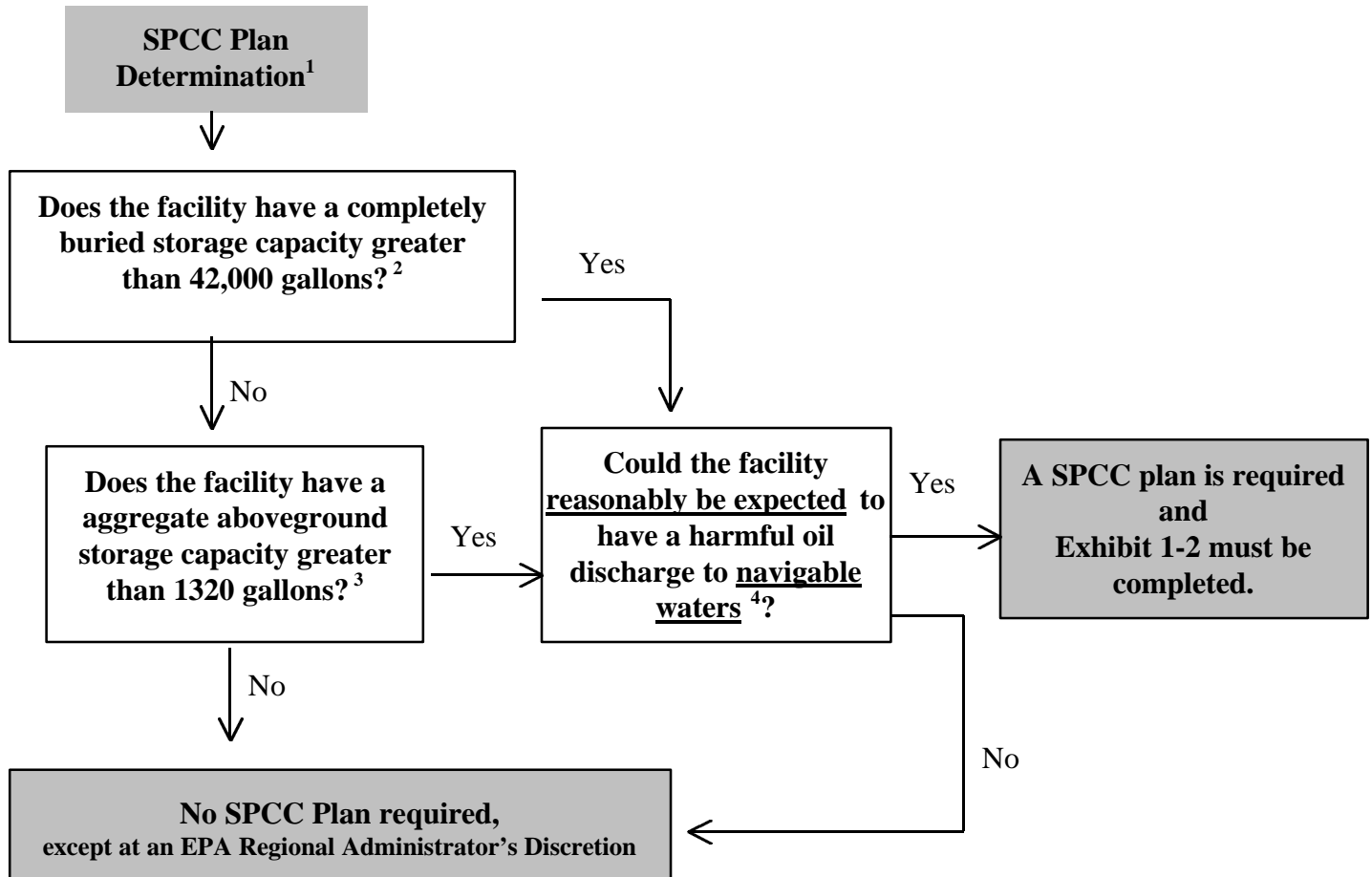
- **Retention Length** - FAA Order 1050.15A, *Fuel Storage Tanks at FAA Facilities* is now more stringent than the Federal Regulations. The Federal records retention requirement is three years, but Paragraph 88 of FAA's FST Order requires that all inspections, testing results, and release monitoring records be maintained for at least five years.
  - **Location** - Option for the records to either be "kept with" the SPCC Plan or be "part of" the SPCC Plan.
  - **Format** - Records of required inspections and tests may be maintained in electronic or any other format, which is readily accessible to the facility and to EPA personnel.
10. **Employee Training** - The training requirements have been limited to oil-handling employees. However, EPA now specifies that certain subjects must be covered in the training and that the training must be at least annually.
11. **Security** - New requirement for drain valves to be locked in closed position. [*Note: There are other new security items, but FAA Orders already require FAA facilities to do these.*]
12. **§112.8(d) Facility Transfer Operations, Pumping, and Facility Process** - The requirements within this section are mostly new requirements for FAA facilities (i.e., not previously covered in a previous SPCC Plan).
13. **Historical Spill Record Requirement** - EPA removed this requirement from the regulations.
14. **Revised Trigger for Submitting Information on Discharges** - EPA revised the trigger for submitting information on discharges to EPA at SPCC regulated facilities. Facilities are now required to submit information after having two discharges over 42 gallons within any 12-month period or a single discharge of more than 1,000 gallons. Regarding the two discharges over 42 gallons submission requirement, the 12-month period is a "running" period. For example, if a facility has discharges of 43 gallons and 60 gallons in May 2004 and December 2004 (respectively), and then a discharge of 43 gallons in May 2005, that facility would be required by the regulations to provide information to EPA (as specified in §112.4) within 60 days from the discharges in December 2004 and May 2005. Of note is the fact that this requirement does not kick-in "... until the expiration of the time permitted for the initial preparation and implementation of the SPCC Plan under §112.3. . . ." The above information submission requirement is in addition to the required reporting to the National Response Center for discharges pursuant to 40 CFR 110 requirements and any State/local reporting requirements.

Exhibits 1-1, 1-2, and 1-3, on the following pages, provide decision trees or a certification of applicability to assist environmental managers and staff in making determinations of the applicability for: (1) EPA's Spill Prevention, Control and Countermeasures (SPCCs); (2) EPA's Facility Response Plan (FRP); and (3) USCG's FRP and other requirements. *Region and Center environmental managers and staff will need to individually address the state and local requirements for their specific locales as this guide does not encompass applicable state and local regulations for above ground tanks and oil spill prevention and control.* FAA's Order 1050.15A, Chapter 8, Paragraph 86.b. states "State and local implementing agencies shall be consulted prior to SPCC plan preparation. EPA requirements shall be implemented at a minimum as well as state or local requirements. . . ." Further, new EPA requirements take precedence over the earlier FAA Order 1050.15a where inconsistencies arise.

Exhibits 1-1, 1-2, and 1-3 must be considered for every facility that uses oil and/or stores oil in aboveground quantities greater than 1320 gallons. There is a de minimus container capacity of 55 gallons. However, electrical equipment (such as transformers) and other equipment that contain 55 gallons or more of oil must be counted even though they are not considered bulk storage containers. More information regarding determining a facility's aboveground and completely buried container oil capacity is provided in the footnotes in Exhibit 1-1 and within Table 2-1. Further, EPA's discussion of this issue can be found on pages 47064-47066 of the Preamble of the 7/17/02 Final Rule (67 FR 47041).

## EXHIBIT 1-1

### Decision Tree: Applicability Determination for an EPA Spill Prevention, Control and Countermeasures (SPCC) Plan



<sup>1</sup> This determination tree reflects the fact that most FAA facilities are nontransportation-related facilities as defined in the Memorandum of Understanding between EPA and DOT. As such, this triggering mechanism has been removed from this Decision Tree.

<sup>2</sup> "Completely buried tanks" means "any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered above ground storage for this regulation. However, any of the "completely buried tanks" and its associated piping that are SUBJECT TO ALL of the technical requirements of 40 CFR part 280 or SUBJECT TO ALL of the technical requirements of a State program approved under 40 CFR 281 are not counted in the threshold calculation or addressed in the plan. They are included in the required facility diagram. On the other hand, underground storage tanks in 40 CFR 280 that are listed as "excluded," "deferred," or "not included in the UST definition" must be considered in the threshold calculations, unless they are subject to all of technical requirements of an approved State program under 40 CFR 281. Examples of these three categories of USTs include, but are not limited to: airport hydrant fuel distribution systems; UST systems that stores fuel solely for use by an emergency power generator; any USTs 55 gals. to 110 gals.; and machinery or equipment containing oil/petroleum substances for operational purposes, such as hydraulic lift tanks and electrical equipment tanks.

<sup>3</sup> Total AST oil storage capacity must also include any tanks/containers that do not fit in the "completely buried tank" definition, such as "bunkered tanks," "partially buried tanks," and containers in vaults. Facilities need to include the volume of day tanks (connected to engine generators) and electrical transformers containing 55 gals or more of oil in calculating the aggregate aboveground oil storage capacity. FAA information indicates that some of the older day tanks may have individual capacities of 275 and 400 gallons. Five 275 gallon day tanks would put a facility over the 1320 gallon total oil storage capacity trigger. Containers less than 55 gallons are exempt.

<sup>4</sup> Reasonably is determined on the basis of the location of the facility in relation to a stream, ditch, or storm sewer; the volume of material likely to be spilled; drainage patterns; soil conditions; and so forth. The presence of manmade structures that would inhibit the flow of oil is not considered when making the determination. The determination needs to be made carefully. If any oil could reach a storm sewer line, drainage ditch, etc., that discharges into navigable waters, either directly or indirectly, then the facility is subject to the regulation.

**EXHIBIT 1-2**

**Certification of Applicability of an EPA Facility Response Plan (FRP)  
(Certification of Substantial Harm Determination Form)**

[Sources: 40 CFR 112, Appendix C-II]

**If there is a "yes" answer to one or more of the five questions below,  
then an EPA FRP Plan is required.**

**NOTE: If all "no" answers, an EPA Regional Administrator can still require an FRP at his/her discretion.**

Facility Name \_\_\_\_\_

Facility Address \_\_\_\_\_

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? **Yes** \_\_\_\_\_ **No** \_\_\_\_\_
2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and, within any storage area; does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation? **Yes** \_\_\_\_\_ **No** \_\_\_\_\_
3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? **Yes** \_\_\_\_\_ **No** \_\_\_\_\_
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR 112 or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake? **Yes** \_\_\_\_\_ **No** \_\_\_\_\_
5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years? **Yes** \_\_\_\_\_ **No** \_\_\_\_\_

**CERTIFICATION**

I certify under penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature \_\_\_\_\_

Date \_\_\_\_\_

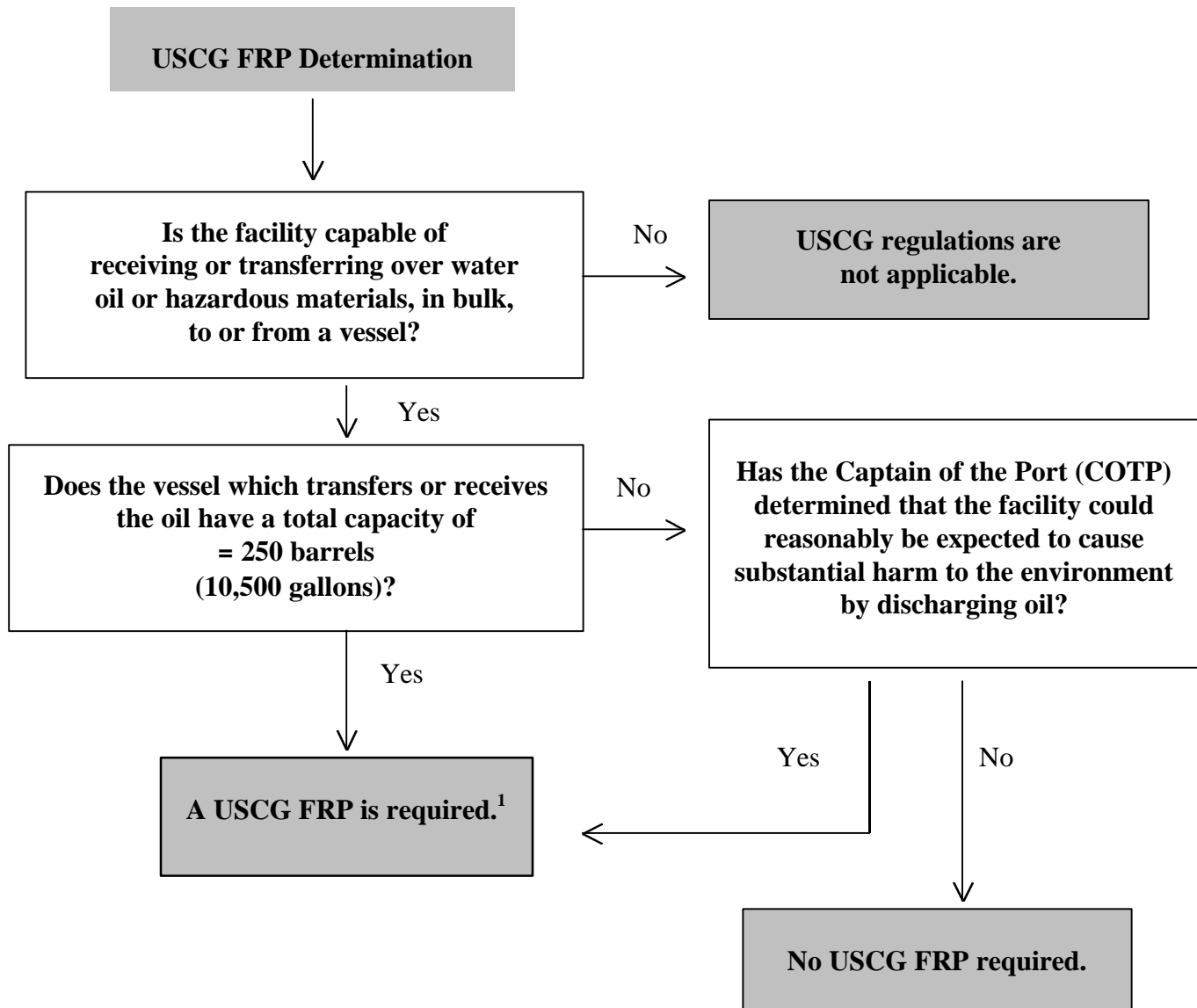
Name (type or print) \_\_\_\_\_

Title \_\_\_\_\_



**EXHIBIT 1-3**

**Decision Tree for an Applicability Determination for a  
U.S. Coast Guard Facility Response Plan (FRP)**



<sup>1</sup> If a USCG FRP is required, other additional CG requirements may also apply—specifically other sections within 33 CFR Part 154 (in addition to subpart F) and 33 CFR 156.

## 2.0 SPCC Plan Elements and Requirements

The purpose of a SPCC Plan is to identify controls and countermeasures that have been developed to minimize the likelihood and severity of a petroleum product release from the facility. As such, a SPCC plan shall include, at minimum, the following elements in plain language:

- Cover page with facility owner, type, location information
- Certification of the plan by a licensed professional engineer
- Documentation of required reviews of plan
- Written facility management approval
- Facility location and contact information
- Description of facility
- Aboveground container unit-by-unit capacity, type and quantity of oil stored, and estimates of quantity of oils that could be potentially discharged
- Diagram/layout of facility including location and contents of each container and all transfer stations and connecting pipe. In addition, the diagram must include all/any “completely buried storage tanks,” and connected underground piping, underground ancillary equipment, and containment systems that are subject to the technical requirements of 40 CFR 280 or subject to the technical requirements of a State program approved under 40 CFR 281. [Buried piping installed/replaced after August 16, 2002 must have protective wrapping and coating and cathodic protection.]
- Prediction of the direction of flow, rate of flow, and total quantity of oil that could be discharged from the facility as a result of each major type of failure
- Description of any containment and diversionary structures.
- Description of any facility drainage structures
- Description of all bulk storage tanks and measures present to aid in prevention of releases
- Descriptions relating to transfer operations, pumping, and in-plant facility processes (such as SOPs, etc.)
- Inspections and records discussion
- Description of facility/operations security and plans for ongoing coordination with the Security Servicing Element (SSE)
- Description of personnel training and spill prevention
- Certification of Substantial Harm Determination Form (i.e., Exhibit 1-2, Certification of Applicability of an EPA Facility Response Plan)

Table 2.1- 40 CFR Part 112 SPCC Requirements, provides the 40 CFR Part 112 SPCC requirements in a concise format.

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

<b>Subpart A - Applicability, Definitions, and General Requirements For All Facilities and All Types of Oil</b>		
40 CFR 112.1	(b)	Clarifies that the regulations apply to "using or consuming oil and oil products" (i.e. oil filled electrical equipment, such as transformers and hydraulic equipment)
<p><i>Note: The chart is not including the requirements in Subpart A regarding transportation-related versus non-transportation-related or onshore and offshore. Most FAA facilities (other than maybe up in AK) are non-transportation-related onshore facilities.</i></p>		<p><b>Regarding "discharge of oil that would be become a discharge as described in 40 CFR 112.1(b)" [as this is referenced in other sections of 40 CFR 112]</b> - 40 CFR 112(b) states the following: ". . . could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, . . ." 40 CFR 110.3 states the following: ". . . discharges of oil in such quantities that the Administrator has determined may be harmful to the public health or welfare or the environment of the United States include discharges of oil that: (a) Violate applicable water quality standards; or (b) <b>Cause a film or sheen upon or discoloration of the surface of the water</b> or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines."</p>
	(b)(4)	States that any "bunkered tank" or "partially buried tank" or any container in a vault are considered to be "aboveground storage containers" for purposes of this regulation
<b>REGULATORY THRESHOLD DETERMINATION:</b>		
<p><i>With the new inclusion of airport hydrant fuel distribution systems within the aggregate threshold determination, FAA oil containing tanks and equipment may need to be included in an airport's SPCC. Airports previously may not have had to develop SPCC Plans.</i></p>	(d) (2)	(i) >42,000 gallons is an aggregate threshold for "completely buried tanks.
	also (d)(4)	<p>However, the rule exempts "completely buried tanks" that are SUBJECT TO ALL technical requirements of the Federal Underground Storage Tank rules (I.E., 40 CFR part 280) or SUBJECT TO ALL of a State program approved under 40 CFR 281 from the threshold calculation and all but one section of the substantive regulations-- must include these exempted tanks in required facility diagram.</p> <p>In addition, the "Completely buried tanks" aggregate threshold also excludes "permanently closed" containers.</p> <p>The term "underground storage tank (UST)" is not the same as "completely buried tanks. As a result, USTs in 40 CFR 280 that are listed as "excluded," "deferred," or "not included in the UST definition" must be considered in the threshold calculations, unless they are subject to all of technical requirements of an approved State program under 40 CFR 281. Examples of these three categories of underground storage tanks (USTs) include, but are not limited to: airport hydrant fuel distribution systems; UST systems that stores fuel solely for use by an emergency power generator; any USTs 55 gals. to 110 gals.; and machinery or equipment containing oil/petroleum substances for operational purposes, such as hydraulic lift tanks and electrical equipment tanks.</p>
<p><i>FAA facilities must include the volume of 55 gal or larger day tanks (connected to engine generators), <b>electrical transformers containing 55 gals or more of oil, and 55 gal or larger containers for recycled oil</b> in calculating the aggregate aboveground storage capacity determination.</i></p>	also (d)(5)	<p>(ii) &gt;1,320 gallons is the aggregate aboveground storage capacity threshold trigger. [EPA eliminated the 600-gallon single container threshold plan trigger.]</p> <p>Only containers of 55 gallons or more are counted in determining aggregate above ground storage capacity.</p> <p>Aggregate aboveground storage capacity includes all tanks/containers that do not meet the definition of "completely buried tank", including bunkered tanks and partially buried tanks.</p>
	(d)(6)	Any facility or part thereof used exclusively for wastewater treatment (such as oil-water separators) and which are not used to satisfy any requirement of this part are exempted from this part. The production, recovery, or recycling of oil is not wastewater treatment for purposes of this section.

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

- |     |   |
|-----|---|
| (e) | <p>Specifies purpose of SPCC Plan: "to form a comprehensive Federal/state spill prevention program that minimizes the potential for discharges".</p> <p>SPCC Plan must address all relevant spill prevention, control, and countermeasures necessary at the specific facility.</p> <p>States that compliance with this part does not in any way relieve the owner or operator from compliance with other Federal, state, or local laws.</p> |
| (f) | <p>An EPA Regional Administrator (RA) can require a facility to do a SPCC plan or certain portions of a SPCC Plan regardless of exemptions.</p>   |

**40 CFR 112.2**

*In many cases, EPA has changed to using the word "container," instead of the word "tank."*

*Also, EPA's use of "container" is not limited to a particular amount of storage capacity and should not be confused with definitions used in some fire codes.*

*Lastly, EPA has revised the rule to use the term "discharge prevention," instead of the term "spill prevention."*

**DEFINITIONS:**

**Alteration** - Any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of the container.

**Bulk Storage Container** - Any container used to store oil. Oil-filled electrical, manufacturing or operational equipment is not included in this definition. [Therefore, they are not subject to the bulk storage requirements of the rule, such as under 40 CFR 112.8(c) (integrity testing, and fail safe engineering).]

**Bunkered Tank** - A container constructed or placed in the ground by cutting the earth and re-covering the container in a manner that breaks the surrounding natural grade, and is covered with earth, sand, gravel, asphalt, or other material. A bunkered tank is considered an aboveground storage container for purposes of this part.

**Completely Buried Tank** - Any container completely below ground and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers for purposes of this part.

**Facility** - Any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and waste treatment, or in which oil is used (may be as small as a piece of equipment or as large as a oil field or a military base).

**Partially Buried Tank** - A storage container that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth, sand, gravel, asphalt, or other material. A partially buried tank is considered an aboveground storage container for purposes of this part.

**Permanently Closed Container** - Any container or facility for which: (1) all liquid and sludge has been removed from each container and connecting line; and (2) all connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.

**Repair** - Any work necessary to maintain or restore a container to a condition suitable for safe operation, other than that necessary for ordinary, day-to-day maintenance to maintain the functional integrity of the container and that does not weaken the container.

**Storage Capacity** [of a container] - Means the shell capacity of the container.

**40 CFR 112.3**

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An owner or operator subject to the regulation must prepare a SPCC plan in writing.

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

	<p>(a) <u>For facilities in operation on or before 8/16/02 that meet the regulatory threshold for developing a SPCC Plan:</u></p> <p>Maintain the existing SPCC plan until such time as the existing plan is amended to be in compliance with the 7/02 revisions to the regulations. <b>The existing plan must be amended by 8/17/04 (or before) and the amended plan must be implemented as soon as possible, but no later than 2/18/05.</b></p> <p><u>For facilities that became operational after 8/16/02 through 2/18/05 that meet the regulatory threshold for developing a SPCC plan:</u></p> <p>Prepare and fully implement a SPCC plan as soon as possible, but no later than 2/18/05.</p> <p>(b) <u>For facilities that became operational after 2/18/05 that meet the regulatory threshold for developing a SPCC plan:</u></p> <p>Prepare and implement a SPCC plan before operations begin.</p> <p>(d) A licensed professional engineer (P.E.) must review and certify the SPCC Plan.</p> <p>(d)(1) P.E. Certification must include the following attestations:</p> <ul style="list-style-type: none"> <li>(i) That he/she is familiar with 40 CFR 112;</li> <li>(ii) The P.E. or his/her agent has visited and examined the facility;</li> <li>(iii) The SPCC Plan has been prepared in accordance with good engineering practices, including consideration of industry standards and the requirements of the rule;</li> <li>(iv) Procedures for required inspections and testing have been implemented; and</li> <li>(v) The SPCC Plan is adequate for the facility.</li> </ul> <p>(d)(2) <u>The PE certification, in no way, relieves the owner or operator of his/her duty to prepare and fully implement the SPCC Plan in accordance with 40 CFR 112.</u></p> <p>(e)(1) A complete SPCC Plan must be maintained at the facility if the facility staffed 4 or more hours per day, or at the nearest field office if the facility is not so attended; <b>and</b></p> <p>(e)(2) SPCC plan must be available to EPA Regional Administrator [or his/her representative] for onsite review during normal working hours.</p> <p>(f) [addresses extension of time issues]</p>
<p>40 CFR 112.4</p> <p><i>This notification/submittal to EPA is not the same as the notification required under 40 CFR 302 and 304 to the National Response Center and others at state and local levels.</i></p>	<p>(a) Submission of information to EPA Regional Administrator within 60 days is required whenever facility has discharged:</p> <ul style="list-style-type: none"> <li>• more than 1000 gallons of oil in a single discharge; or</li> <li>• more than 42 gallons of oil in 2 separate incidents within "ANY 12 month period." [The "any 12 month period" is a continually rolling timeframe.]</li> </ul> <p>(b) Section (a) directly above does not apply "until the expiration of the time permitted for the initial preparation and implementation of the SPCC Plan," which would be no later than 2/18/05. It is earlier than 2/18/05 if SPCC Plan was amended due to the 40 CFR 112 revisions and implemented before then.</p>

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

	(c)	Submission of information to the state in which facility is located: A copy of the same information that is sent to the EPA Regional Administrator is required to be sent to appropriate agency or agencies in charge of oil pollution control activities in the state.
	(d), (e), and (f)	[concerns amending the plan upon request by EPA Regional Administrator]
40 CFR 112.5	(a)	<p>Must amend SPCC Plan in accordance with general requirements of 112.7, and with any specific section of 40 CFR 112 that is applicable to the facility whenever there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge.</p> <p>Examples of changes that may require an amendment include (but are not limited to):</p> <ul style="list-style-type: none"> <li>• commissioning or decommissioning containers;</li> <li>• replacement, reconstruction, replacement, or installation of piping systems;</li> <li>• construction or demolition that might alter secondary containment structures;</li> <li>• changes of product or service; or</li> <li>• revision of standard operation or maintenance procedures at the facility.</li> </ul> <p>Amendment of SPCC Plan must be prepared within 6 months, and must be implemented as soon as possible, but no later than 6 months following preparation of amendment of SPCC Plan.</p>
	(b)	<p>The SPCC Plan must be reviewed and evaluated at least once every <b>5 years</b> by the owners or operators of the facility.</p> <p>As a result of the review and evaluation, the SPCC Plan must be amended to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of discharge.</p> <p>Must document completion of the review and evaluation in a signed statement as to whether the SPCC plan will be amended.</p> <p>The following will suffice:          "I have completed review and evaluation of the SPCC Plan for <u>(name of facility)</u> on <u>(date)</u>, and <u>(will/will not)</u> amend the SPCC Plan as a result. <u>(printed name)</u> <u>(signature)</u> "</p> <p>Documentation of review and evaluation must be located in one of the following 4 locations: (1) at the beginning of the SPCC Plan; (2) at the end of the SPCC Plan; (3) in a log book that is appended to the SPCC Plan; or (4) in an appendix of the SPCC Plan.</p>
<i>In the 7/17/02 Final Rule Preamble, EPA states that P.E. certification is not required for non-technical amendments, such as changes to the contact list and phone numbers.</i>	(c)	Amendments to the SPCC Plan are certified by a licensed professional engineer.
40 CFR 112.7	-	Must prepare a SPCC Plan in accordance with good engineering practices.
	-	Full approval must be given by management at a level of authority to commit the necessary resources to fully implement the SPCC Plan.
	-	SPCC Plan must be in writing.

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

-	<p><b>The SPCC Plan follows the sequence of § 112.7.</b> Alternatively, prepare an equivalent plan (such as the “One Plan”) and supplement the equivalent plan with a section cross-referencing the location of requirements listed in 40 CFR 112 and the equivalent requirements of the other prevention plan.</p> <p>If the SPCC Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, these must be discussed in separate paragraphs, and the details of installation and operational start-up explained separately.</p>
(a)(1)	Must include a discussion of facility’s conformance with the requirements listed in 40 CFR 112.
(a)(2)	<p>Must comply with all applicable requirements listed in 40 CFR 112.</p> <p>However, SPCC Plan may deviate from CERTAIN requirements in within 40 CFR 112.7-112.14, if equivalent environmental protection is provided by some other means of spill prevention, control, or countermeasures. Reasons for the deviations must be documented in the SPCC Plan, as well as a discussion of the alternative methods and how they achieve equivalent environmental protection.</p>
(a)(3)	<p>Facility diagram must include location and contents of each container, transfer stations, and connecting pipes. All “completely buried tanks” that are otherwise exempted from this part under 40 CFR 112.1(d)(4) must also be included in the facility diagram.</p> <p><b>The SPCC Plan must also address:</b></p> <ul style="list-style-type: none"> <li>(i) Type of oil in each container and its storage capacity;</li> <li>(ii) Discharge prevention measures, including procedures for routine handling of products (loading, unloading, and facility transfers, etc.)</li> <li>(iii) Discharge or drainage controls, such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;</li> <li>(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility’s capability and those that might be required of a contractor);</li> <li>(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and</li> <li>(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, state, and local agencies who must be contacted in case of a discharge.</li> </ul>
(a)(4)	<p>Must provide information and procedures in the SPCC Plan to enable a person reporting a discharge to relate the information: [unless a “facility response plan (FRP)” under 40 CFR 112.20 has been submitted]</p> <ul style="list-style-type: none"> <li>• Exact address or location and phone number of the facility;</li> <li>• Date and time of the discharge;</li> <li>• Type of material discharged;</li> <li>• Estimate of total quantity discharged;</li> <li>• Source of the discharge;</li> <li>• Description of all affected media (e.g., surface water, groundwater, etc.);</li> <li>• Any damages or injuries caused by the discharge;</li> <li>• Actions being used to stop, remove, and mitigate the effects of the discharge;</li> <li>• Whether an evacuation may be needed; and</li> <li>• Names of individuals and/or organizations who have also been contacted.</li> </ul>
(a)(5)	Organize the portion of the SPCC Plan describing the procedures that will be used when a discharge occurs in such a way that will make them readily usable in an emergency and include appropriate supporting information as appendices. [unless a FRP under 40 CFR 112.20 has been submitted]
(b)	Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of discharge), the SPCC Plan must include the following for each major type of failure: a prediction of the spill’s direction, rate of flow; and total quantity of oil that could be discharged as a result of each type of major equipment failure.

*The certain requirements that can be deviated from are not generally appropriate to many FAA facilities.*

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

<p>FAA facilities will need to construct a spill berm/catch basin to meet this requirement relative to loading/unloading of containers.</p>	(c)	<p>Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in 40 CFR 112.1(b).</p>
<p>The main criteria for a berm/spill catch basin is that it is: (1) sufficiently impervious; (2) able to catch any large spill from any oil container; and (3) doesn't create a fire hazard (i.e., a low area that could collect enough fumes to be readily set off by an ignition source).</p>	(c)(1)	<p>ONSHORE FACILITIES:</p> <div> <div> <p>(i) dikes, berms, or retaining walls (sufficiently impervious to contain oil);</p> <p>(ii) curbing;</p> <p>(iii) culverts, gutters, or other drainage systems;</p> <p>(iv) weirs, booms, or other barriers;</p> </div> <div> <p>(v) spill diversion ponds;</p> <p>(vi) retention ponds; and/or</p> <p>(vii) sorbent materials.</p> </div> </div>
<p><i>It is FAA policy (FAA Order 1050.15A, Chapter 8, Paragraph 87) that new ASTs be a minimum of double-walled or vaulted and all piping have secondary containment.</i></p>	(c)(2)	<p>OFFSHORE FACILITIES:</p> <div> <p>(i) curbing, drip pans; and/or</p> <p>(ii) sumps and collection systems.</p> </div>
<p>Use of this section by most FAA facilities is cost prohibitive. The cost of developing an oil spill contingency plan following 40 CFR 109 and the written commitment of personnel, equipment, etc. is much more than the cost for a facility to get a spill berm/catch basin.</p>	(d)	<p>If the installation of structures or equipment listed in §112.7(c) [directly above] and certain 112.8-112.14 requirements is not practicable as determined by the facility, the SPCC Plan <b>must</b>:</p> <ul style="list-style-type: none"> <li>Clearly explain why not practicable &amp; for bulk storage containers, conduct both periodic integrity testing of containers and periodic integrity testing and leak testing of valves and piping); <b>and</b></li> <li>Unless a FRP under 40 CFR 112.20 has been submitted, develop: <ul style="list-style-type: none"> <li>(1) A strong oil spill contingency plan following 40 CFR 109; and</li> <li>(2) A written commitment of staffing, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.</li> </ul> </li> </ul>



**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

<p><i>The written inspection procedures are those procedures developed for the facility by the owner or operator or the certifying engineer.</i></p> <p>-----</p> <p><i>FAA Order 1050.15 A, Chapter 8, Paragraph 87, states that: "Release monitoring shall be inspected, tested and recorded in accordance with the site-specific SPCC Plan." <b>Chapter 8 also states in Paragraph 88, that inspections, all testing results, and release monitoring records shall be maintained at the facility or nearest AF field office for at least 5 years. This FAA requirement is more stringent than the SPCC requirements.</b></i></p>	<p>(e) <b>INSPECTIONS, TESTS, AND RECORDS:</b> Conduct inspections and tests required by 40 CFR 112 in accordance with written procedures that the owner/operator or certifying engineer developed for the facility.</p> <p>A copy of the written procedures and a record of inspections and tests (signed by the appropriate supervisor or inspector) <b>must</b> be kept with the SPCC Plan for a period of 3 years.</p> <p>Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph. For example, a facility may use usual and customary business records for record keeping requirements for inspections, secondary containment drainage events, and integrity testing (e.g. NPDES stormwater records).</p>
<p><i>FAA Order 1050.15A, Chapter 8, Paragraph 90 states: "The facility manager shall ensure that spill prevention briefings are conducted for operating personnel annually to ensure adequate understanding of the SPCC plan for the facility."</i></p> <p><i>FAA Order 1050.15A, Chapter 8, Paragraph 83 states minimal elements of an SPCC plan and "h" says: "Person(s) designated by management as responsible for oil spill prevention."</i></p> <p><i>FAA Order 1050.15A, Chapter 8, Paragraph 90 also states: "Training exercises in accordance with the site-specific SPCC plan shall be conducted annually in the operation and maintenance of equipment to prevent the discharges of oil."</i></p>	<p>(f) <b>PERSONNEL, TRAINING &amp; DISCHARGE PREVENTION PROCEDURES:</b></p> <p>(f)(1) Owners/operators are responsible for properly training their oil-handling personnel in:</p> <ul style="list-style-type: none"> <li>• the operation and maintenance of equipment to prevent discharges;</li> <li>• discharge procedure protocols;</li> <li>• applicable pollution control laws, rules, and regulations; and</li> <li>• the content of the facility SPCC plan.</li> </ul> <p>Owners/operators must designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.</p> <p>(f)(2) Owners/operators must schedule and conduct discharge prevention briefing for oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for the facility. Such briefings must highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures.</p> <p>(f)(3)</p>

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

	(g)	SECURITY (excluding oil production facilities):
FAA Order 1050.15A, Chapter 8, Paragraph 80.c. requires security fencing and locked gates when unattended.	(g)(1)	Plants handling, processing, and storing oil <b>must</b> be fully fenced; <b>and</b> entrance gates are locked and/or guarded when the plant is unattended.
	(g)(2)	Any valves that permit outflow of a container's contents <b>must</b> have adequate security measures so that they remain closed when in non-operating or non-standby status.
	(g)(3)	Oil pump starter controls in non-operating or non-standby status <b>must</b> be locked in the off position and accessible only to authorized personnel.
FAA Order 1050.15A, chapter 8, Paragraph 87 requires that all new fill pipes must have locking caps.	(g)(4)	The loading and loading-connections of oil pipelines or facility piping <b>must</b> be securely capped or blank-flanged when not in service or in standby status for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.
FAA Order 1050.15A, Chapter 8, Paragraph 80.c. requires lighting.	(g)(5)	Lighting <b>must</b> be commensurate with the type and location of facility that will assist in: <ul style="list-style-type: none"> <li>(i) Discovering discharges at night both by operating personnel, if present, and by non-operating personnel; and</li> <li>(ii) Preventing discharges occurring through acts of vandalism.</li> </ul>
Note: EPA has stated that there is litigation ongoing regarding this section. It is being held by many, including FAA and the Navy, that this section is only applicable to those facilities which have a "loading/unloading RACK". Thus, this section will not be applicable to most FAA facilities. <b>However, loading and unloading of containers must be addressed pursuant to 40 CFR 112.7(a)(3), (b) and (c).</b>	(h)	<b>FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK (excluding offshore facilities).</b>
	(h)(1)	Use a quick drainage system for tank truck and tank car loading and unloading where a loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges.  Any containment system must be designed to hold at least the maximum capacity of any single compartment of a tank truck or tank car loaded or unloaded at the facility.
	(h)(2)	An interlocked warning light or physical barrier system, warning sign, wheel chocks, or vehicle break interlock system must be used in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.
	(h)(3)	Prior to filling and departure of any tank truck or tank car, closely inspect for discharges at the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.
	(i)	Evaluation must be done for field constructed aboveground storage containers undergoing repair, alteration, reconstruction, change in service, or where risk of discharge or failure due to brittle fracture or other catastrophe. After the evaluation, appropriate action must be taken.
	(j)	The SPCC Plan <b>must</b> also include a complete discussion of conformance with the following applicable guidelines, other effective spill prevention and containment procedures (or, if more stringent, with State rules, regulations and guidelines).
<b>Subpart B - Requirements for Petroleum Oils, and Non-Petroleum Oils, Except Animal Fats . . .</b>		
40 CFR 112.8		ONSHORE FACILITIES (excluding production facilities).

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

<p><i>Very few FAA facilities have diked AST exterior storage.</i></p>	(a)	Owners/Operators must meet the general requirements for the SPCC Plan listed under 40 CFR 112.7 and the specific discharge prevention and containment procedures listed in this section.
	(b)	<b><i>FACILITY DRAINAGE.</i></b>
	(b)(1)	Drainage from diked storage areas must be restrained by valves or other positive means to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge.
	(b)(2)	Valves used for the drainage of diked areas must be manual, open-and-close design.  If a facility drainage drains directly into a watercourse and not into an onsite wastewater treatment plant, inspect and drain uncontaminated retained stormwater as proved in 40 CFR 112.8(c)(3) (ii), (iii), and (iv).
	(b)(3)	Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility.  Catchment basins may not be located in areas subject to periodic flooding.
	(b)(4)	If facility drainage is not engineered as in (b)(3) directly above, the final discharge of all ditches inside the facility must be equipped with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.
	(b)(5)	Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques are used, engineer facility drainage systems to prevent a discharge in case there is an equipment failure or human error at the facility.

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

	(c)	<b>BULK STORAGE CONTAINERS.</b> [Note: "Bulk storage container" means "any container used to store oil". These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. <b>Oil-filled electrical, operating, or manufacturing equipment (such as transformers) are not bulk storage containers.</b> ]
	(c) (1)	Owner/operators <b>can not</b> use a container for storage of oil unless its material and construction are compatible with the materials stored and conditions of storage, such as pressure and temperature.
<p><i>FAA Order 1050.15A, Chapter 8, Paragraph 87 requires that ASTs be a minimum of double-walled or vaulted and all piping have secondary containment. However, FAA facilities will need to construct a spill berm/catch basin to meet this requirement relative to loading/unloading of containers. The P.E. must be comfortable with the adequacy of the discharge prevention system.</i></p>	(c) (2)	<p>All bulk storage container installations <b>must</b> have secondary containment for the largest single tank plus an allowance for precipitation.</p> <p>Dikes, containment curbs, and pits are commonly employed for this purpose. An alternative system may consist of a drainage trench enclosure. It must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.</p> <p>Dike walls and floors <b>must</b> be sufficiently impervious to contain discharged oil.</p>
	(c) (3)	<p>Owner/operators can not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of effluent into an open watercourse, lake, or pond, bypassing the facility treatment system, unless the following is done:</p> <ul style="list-style-type: none"> <li>(i) Normally keep the bypass valve sealed and closed;</li> <li>(ii) Inspect the retained water to ensure that its presence will not cause an oil discharge as described under 40 CFR 112.1(b);</li> <li>(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and</li> <li>(iv) Keep adequate records of bypassing and drainage events.</li> </ul>
	(c) (4)	<p>Buried metallic storage tanks installed on or after 1/10/74 must be protected from corrosion by coatings or cathodic protection compatible with local soil conditions.</p> <p>In addition, buried metallic storage tanks must be regularly leak tested.</p>
	(c) (5)	Partially buried or bunkered metallic tanks can not be used for oil storage unless the buried section of the tank is protected from corrosion, using coatings or cathodic protection compatible with local soil conditions.
<p><i>FAA Order 1050.15A Chapter 8, Paragraph 92 requires ASTs to be tested every ten years. This would be a minimum as good management practices would dictate more frequently,</i></p>	(c) (6)	<p>Above ground containers must be subject to integrity testing on a regular schedule and whenever material repairs are made.</p> <ul style="list-style-type: none"> <li>• The frequency and type of testing must take into account container size and design.</li> <li>• <b>Visual inspection must be combined with another testing technique</b> such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic testing, or another system of non-destructive shell testing.</li> <li>• Comparison records must be kept.</li> <li>• A container's supports and foundations must be inspected.</li> <li>• The outside of a container must be inspected frequently for signs of deterioration, discharges, or accumulation of oil inside diked areas.</li> </ul> <p>Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.</p>
	(c) (7)	<p>IF INTERNAL OR EXTERNAL HEATING COILS ARE USED:</p> <p>Internal heating coil leakage must be controlled by considering one of the following:</p> <ul style="list-style-type: none"> <li>• The steam return or exhaust lines for oil are monitored;</li> <li>• The lines are passed through a separation system; or</li> <li>• An external heating system is installed.</li> </ul>

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

*FAA Order 1050.15A, Chapter 8, Paragraph 87 requires that ASTs provide interstitial monitoring of the tank and piping system, automatic tank gauging, and automatic line leak detection.*

- |         |  |
|---------|--|
| (c)(8)  | <p>Owner/operator must engineer or update each container installation in accordance with good engineering practice to avoid discharges. At least one of the following devices must be provided:</p> <ul style="list-style-type: none"> <li>(i) High liquid level alarms with an audible or visual signal at constantly attended operation or surveillance station;<br/>[In smaller facilities, an audible air vent may suffice.]</li> <li>(ii) Automatic high liquid level pump cutoff devices set to stop flow at a predetermined container content level;</li> <li>(iii) A direct audible or code signal between the container gauge and pumping station;</li> <li>(iv) A fast response system to detect oil level of each storage tank; or<br/>[To use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.]</li> <li>(v) Regularly testing liquid level sensing devices to ensure proper operation.</li> </ul> |
| (c)(9)  | <p>Plant effluent discharged directly into navigable waters must be observed frequently enough to detect upsets.</p>   |
| (c)(10) | <p>Visible oil leaks from container seams, gaskets, rivets and bolts must be promptly corrected.</p> <p>Any accumulation of oil in diked areas must be promptly removed.</p>   |
| (c)(11) | <p>IF MOBILE OR PORTABLE OIL STORAGE CONTAINERS ARE USED:<br/>Mobile or portable oil storage containers <b>must</b> be:</p> <ul style="list-style-type: none"> <li>• Located to prevent spilled oil from reaching navigable waters; and</li> <li>• Provided with secondary containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.</li> </ul>  |

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

	(d)	FACILITY TRANSFER OPERATIONS, PUMPING, AND INPLANT PROCESS.
	(d)(1)	<p>Buried piping installed or replaced on or after 8/16/02 must be protectively wrapped and coated.</p> <p>Buried piping installations must also be cathodically protected or otherwise satisfy the corrosion protection standards for piping in 40 CFR 280 or a state program approved under 40 CFR 281.</p> <p>If buried piping is exposed for any reason, it must be inspected for deterioration. If corrosion damage is found, additional inspection and correction must be taken as indicated by the magnitude of the damage.</p>
	(d)(2)	<p>Pipe terminal connections at the transfer point must, when not in service or in standby service for an extended time be:</p> <ul style="list-style-type: none"> <li>• Capped or blank-flanged; and</li> <li>• Marked as to origin.</li> </ul>
	(d)(3)	Pipe supports must be designed to minimize abrasion and corrosion and allow for expansion and contraction.
	(d)(4)	<p>All aboveground valves, piping, and appurtenances must be regularly inspected, including the general condition of items, such as flange joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.</p> <p>Integrity and leak testing of buried piping must be done at the time of installation, modification, construction, relocation, or replacement.</p>
	(d)(5)	All vehicles entering a facility must be warned to ensure that no vehicle will endanger aboveground piping or other oil transfer operations. Warnings may include verbal warnings, signs, or temporary protection of piping or equipment.

### Subpart D - Response Requirements

40 CFR 112.20	(e)	If the owners or operators of a regulated facility are not required to submit a FRP, the SPCC Plan must include a signed certification form contained in Appendix C to Part 112.
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### 40 CFR 109.5 CRITERIA FOR THE DEVELOPMENT AND IMPLEMENTATION OF OIL CONTINGENCY PLANS

- |     |  |
|-----|--|
| (a) | Define authorities, responsibilities and duties of all persons, organizations and/or agencies which are to be involved or could be involved.   |
| (b) | <p>Establish and document notification procedures for the purpose of early detection and timely notification of an oil discharge including:</p> <ol style="list-style-type: none"> <li>(1) The identification of critical water use areas;</li> <li>(2) A current list of names, telephone numbers and addresses of the responsible persons and alternates on call to receive notification of an oil discharge; <ul style="list-style-type: none"> <li>- A list of the names, telephone numbers and addresses of the organizations and agencies to be notified when an oil discharge is discovered;</li> </ul> </li> <li>(3) Provisions for access to a reliable communications system for timely notification of an oil discharge; and</li> <li>(4) An established, prearranged procedure for requesting assistance during an emergency.</li> </ol> |

**Table 2.1 - Major 40 CFR Part 112 SPCC Requirements**

- |     |   |
|-----|---|
| (c) | <p>Include provisions to assure that full resource capability is known and can be committed during an oil discharge situation including:</p> <ul style="list-style-type: none"> <li>(1) Identification and inventory of applicable equipment, materials and supplies which are available [onsite,] locally, and regionally;</li> <li>(2) Estimations of the equipment, materials and supplies which would be required to remove the maximum oil discharge to be anticipated; and</li> <li>(3) Agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials, and supplies to be used in responding to such a discharge.</li> </ul>   |
| (d) | <p>Include provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:</p> <ul style="list-style-type: none"> <li>(1) Specification of any response teams and/or employees with responsibilities for doing any response activities (where all persons are trained and prepared for such responsibility);</li> <li>(2) Predesignation of response coordinator and response incident command structure and procedures;</li> <li>(3) A preplanned location for and emergency operations center/command post;</li> <li>(4) Provisions for varying degrees of response effort depending on the severity of the oil discharge; and</li> <li>(5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected.</li> </ul> |

### 3.0 Sample FAA Facility SPCC Plan

This section provides a sample Airport Surveillance Radar (ASR) SPCC plan for a “typical” FAA ASR facility incorporating the elements described in 2.0 of this guidance. The facility scenario is listed below and illustrates that the FAA facility does not need to be adjacent to a stream or river to trigger to the SPCC requirement. Navigable waters is defined broadly and includes such things as dry storm drainage ditches that eventually flow to streams (intermittent and flowing) and creeks.

“Notes” are provided in italics in the sample plan to help the user better understand the various requirements and/or why certain information is included or needs to be included in the plan.

Care should also be taken to ensure that a facility’s SPCC Plan, based on this sample plan, accurately reflects the equipment, oil use and storage, and structures at the specific facility, as well as the potential impact that any discharge may potentially have.

#### FACILITY SCENARIO:

The sample SPCC is for a typical ASR facility located at an airport. While this ASR and the airport are not located near the ocean, a river, or a stream, the ASR facility’s aggregate aboveground oil storage capacity is above 1320 gallons and this oil is located up-slope and to the west of a dry storm drainage ditch 500 feet away that eventually flows to a small creek called Carol Creek.



SAMPLE

Spill Prevention, Control, and Countermeasure (SPCC) Plan

*Facility:*

ASR Facility, NAS International Airport (IAN)

*Physical Location:*

Located adjacent to D-1 runway  
on the .5 acres of leased ground  
at the NAS International Airport  
Fernville, VA 23456


CERTIFICATION: I hereby certify that my agent or I has examined the facility. Being familiar with the provisions of 40 CFR Part 112, I attest that this SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, that the plan is adequate for this facility, and that the plan is in accordance with 40 CFR 112 requirements.

REGISTERED PROFESSIONAL  
ENGINEER: R. J. McKenny

SIGNATURE: R. J. McKenny  
REGISTRATION NUMBER: 98765

STATE: Maryland

DATE: August 5, 2004  
*Engineer's Seal:*



MARYLAND  
R. J. McKenny  
No. 98765

## REVIEW & EVALUATION OF SPCC PLAN - 40 CFR 112.3 and 112.5

### REVIEW & EVALUATION, AND TECHNICAL AMENDMENT DOCUMENTATION

A review and evaluation of the SPCC plan is completed at least once every five years. All five year review and evaluations, and all substantive/technical amendments to the SPCC plan are certified by a licensed professional engineer in accordance with §112.3(d). The table below documents the completion of the review and evaluation, as well as when the SPCC Plan is amended because of technical changes to the facility.

#### Notes:

1. Concerning the engineer's certification on the cover page and in the table below, SPCC Plan certification by a licensed professional engineer is required for an initial SPCC Plan and all technical amendments to SPCC Plan. See the cover certification statement that contains all the requirements that must be met for the licensed professional engineer to sign an SPCC Plan or an amendment.
2. One must be aware that the engineer's certification does not relieve FAA personnel of their duty to prepare and fully implement the SPCC plan. [Citation: 40 CFR 112.3(d)(2)]
3. Under 40 CFR 112: (a) the licensed professional engineer may be someone inside or outside of FAA; and (b) the licensed professional engineer does not have to be licensed in the state where the facility is located.

Reason for Review	Statement Regarding Review & Evaluation* (* required for 5 year reviews and evaluation)	Facility Designated SPCC Discharge Prevention Coordinator	Licensed Professional Engineer Who Has Certified SPCC Plan
7/17/02 SPCC Federal Regulation Revisions	NA	Signature: _____ Steve Doe Print Name: _____ Steve Doe Date: _____ 3/15/04	Signature: _____ R. J. McKenny Print Name: _____ R. J. McKenny Date: _____ 3/15/04
* (next 5 year review and evaluation)	I have completed the review and evaluation of the SPCC Plan for the IAN ASR facility on 1/10/09 and will [will/will not] be amending the SPCC Plan.	Signature: _____ Steve Doe Print Name: _____ Steve Doe Date: _____ 1/10/09	Signature: _____ R. J. McKenny Print Name: _____ R. J. McKenny Date: _____ 6/27/09
* (technical amendment needed because replacing large oil storage container)	NA	Signature: [will need to be signed and dated] _____ Print Name: _____ _____ Date: _____ _____	Signature: [will need to be signed and dated] _____ Print Name: _____ _____ Date: _____ _____

## NON-TECHNICAL/ADMINISTRATIVE AMENDMENT DOCUMENTATION

Non-technical/Administrative modifications are made, as appropriate, to ensure the accuracy of plan information in response to modifications in the assignment of personnel or contact information (e.g., telephone numbers). The modifications are documented in the table below.

Date	Reason for Non-Technical Changes to SPCC Plan	Facility Designated SPCC Discharge Prevention Coordinator
*7/19/04	Telephone number for SPCC Discharge Prevention Coordinator changed.	Signature: <u>Steve</u> <u>Doe</u> Print Name: <u>Steve Doe</u>
		Signature: _____ Print Name: _____

### MANAGEMENT APPROVAL - 40 CFR 112.7

This SPCC plan is fully approved by the management of the FAA, which will provide all the necessary funds and staffing to fully implement the plan as it is described in this document.

John Deer, SMO SECM/RPMES                      August 5, 2004

*Note: This must be signed by management at a level of authority to commit the necessary resources.*

## FACILITY INFORMATION - 40 CFR 112.3(3) and 112.7

Facility Name ASR , NAS International Airport (IAN)

Owner/Operator Name U.S. Federal Aviation Administration

Attended or Unattended Facility Unattended Facility

[Attended is defined as being staffed for 4 or more hours a day.]

SPCC Plan Maintained at \_\_\_\_\_

[Choices: "onsite" if facility is staffed for 4 or more hours a day OR address of nearest FAA field office]

### Physical Address and Directions

The facility is located in Fern County, Virginia approximately 1 1/2 miles southwest of Carol Creek. The facility is located in the middle of the NAS International Airport property adjacent to D-1 runway on .5 acres of leased ground.

Latitude & Longitude \_\_\_\_\_

Street Address \_\_\_\_\_

Telephone Number (if Attended Facility) NA

Designated Contact Name & Title \_\_\_\_\_

Designated Contact's Telephone Number \_\_\_\_\_

### Facility Description

The ASR IAN facility is a radar system which is used to detect and display the azimuth and range of aircraft operating in the airport terminal areas, enabling an Air Traffic Control specialist to provide air traffic control information to pilots. The facility consists of a cinderblock building that has two rooms, which are both accessed externally. The larger room contains radar equipment and the smaller room contains a engine generator, which is for backup power. Fuel for the generator is provided by a 1000 gallon above ground Convault container. This container (#1 below) is located upslope of a dry storm drainage ditch 500 feet away that eventually flows to a small creek. The engine generator has a 60 gallon day tank (#2 container below) associated with it and this is located in the room with the generator. A 500 gallon above ground container (#3 below) was added at facility location in 1997 and is used as a used oil collection location for various FAA operations and maintenance activities occurring in the general area of the ASR facility. Lastly, a transformer containing 78 gallons of oil is situated on a concrete pad adjacent to the cinderblock building.

*Note: FAA Order 1050.15A, Chapter 8, Paragraph 83, specifies that a facility's SPCC plan must be maintained and kept on site if the facility is attended at least 8 hours per day or if practical. Otherwise the SPCC plan must be maintained at the nearest AF field office or equivalent facility type. The revised Federal regulations [40 CFR 112.3(e)(1)] require one to "maintain a complete copy of the [SPCC] Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended . . . ." FAA's Order 1050.15A, Chapter 8, Paragraph 83 is now less stringent*

***than the Federal requirements; and as such, the Federal requirement must be followed over the FAA Order.***

List of Storage Containers and Volumes

Container No.	Volume (gal.)	Contents	Notes
1	1000 aboveground Convault	diesel fuel	bulk storage container; fixed location
2	60 gallon aboveground container (day tank)	diesel fuel	fixed container connected to engine generator; inside building; bulk storage container
3	500 aboveground container	used oil	bulk storage container
4	78 gallon oil-filled transformer	mineral oil	NOT a bulk storage container
Aggregate Capacity: 1638 gallons			

*Note: Below are some other examples of how the regulations' aboveground and completely buried tank regulatory thresholds may impact FAA facilities. It should be noted that the examples below may not have captured all the different oil containers with a capacity of 55 gallons or more at the different FAA facilities.*

*Example #1:* VOR has a 1000 gal. aboveground container, a 50 gallon aboveground container (day tank), and a 340 gallon oil-filled transformer. This puts the VOR facility as having an aboveground aggregate capacity of 1340 gallons, which is over the threshold of 1,320 gallons. [The day tank has a capacity of less than 55 gallons and is not counted.] This example may be applicable to some VOR locations that previously belonged to the military.

*Example #2:* ARTCC has three 8,000 gallon USTs that store fuel solely for use by emergency generators. Because these USTs are only partially subject to the Federal UST program requirement, and because they are only partially subject to their state UST program requirements, this puts the ARTCC as having a "covered" aggregate completely buried capacity of 24,000 gallons. However, this still puts the facility under the threshold of greater than 42,000 gallons. However, the ARTCC also has 5-275 gallon above ground containers (day tanks) and a 500 gallon oil-filled transformer. This puts the ARTCC as having an aboveground aggregate capacity of 1,875 gallons, which is over the threshold of 1,320 gallons.

*Example #3:* The ARTCC has three 15,000 gallon USTs that store fuel solely for use by emergency generators. Because these USTs are only partially subject to the Federal UST program requirement, and because they are only partially subject to their state UST program requirements, this puts the ARTCC as having a "covered" aggregate completely buried capacity of 45,000 gallons. This puts the facility above the threshold of greater than 42,000 gallons.

CONFORMANCE WITH 40 CFR 112 - 40 CFR 112.7(a)(1) and (a)(2) & 112.7(j)

*[Note: The revised regulations require that there be a discussion describing the facility's conformance with 40 CFR 112 requirements, and any more stringent state/local requirements.]*

Discharge Prevention:

It is the facility's goal to not have any oil discharges. As such, the facility has undertaken various measures, which are designed to prevent operational error and equipment failures. These include (but are not limited to):

- operational training
- awareness training
- regular maintenance of equipment
- regular inspections of oil containers at facility
- using containers which have secondary containment
- oil transfers are attended and are never left unattended
- \* transfers of product to (and from) a container are visually tracked by an FAA employee, or designate, to observe for any discharge
- routinely examine aboveground containers and piping to assess their condition
- fuel truck loading and unloading meet the minimum requirements of the US DOT Hazardous Materials Regulations

Discharge Control:

While it is the facility's goal to not have any oil discharges, should a discharge occur, the facility uses several methods to control any discharge. These include (but are not limited to):

- using containers which have secondary containment
- providing a spill diversion catch basin
- having sorbent material onsite to control and/or cleanup small discharges
- training of employees on proper handling and storage practices

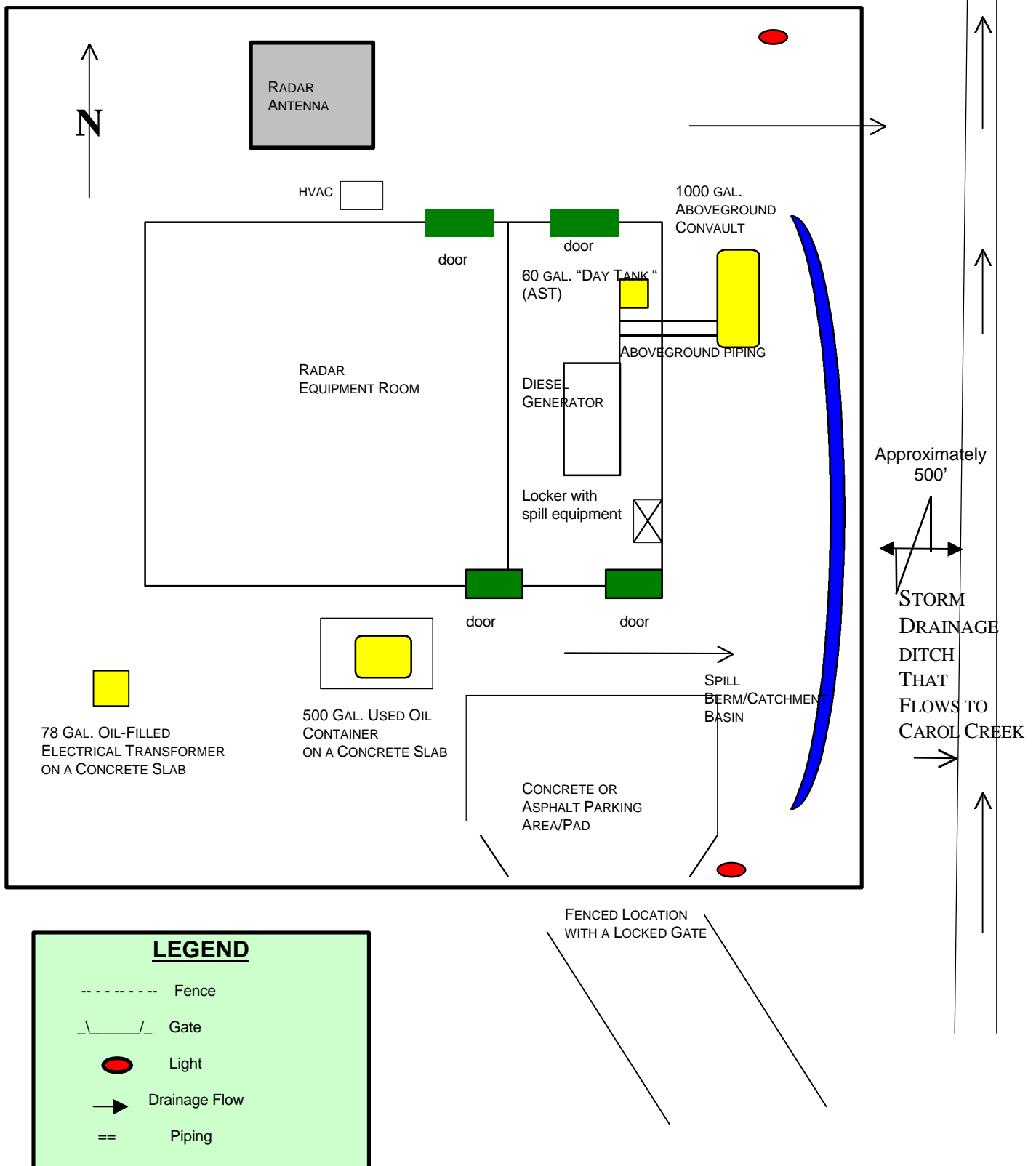
Discharge Countermeasures:

Should a discharge occur, depending on the size, the facility will either undertake the cleanup or the facility will hire a company to undertake the cleanup.

*Note: The "\*" item above includes the requirement in FAA Order 1050.15A, Paragraph 70.b. which states: "All additions of product to the tank shall be visually tracked by an FAA employee, or designate, to observe any spillage." In addition, Chapter 8, paragraph 86.b. states: " . . .An owner/operator of a facility shall ensure that the transfer operation is monitored constantly to prevent overfilling and spill "*

Figure 1 - Layout of FAA Facility

Facility Name: FAA's ASR Facility, NAS International Airport (IAN)



POTENTIAL SPILL VOLUMES AND RATES - 40 CFR 112.7(b)

Above Ground Storage Containers			
Type of Major Failure [or Potential Event]	Max. Possible Quantity Released	Direction of Discharge Flow (relative to storm drainage ditch)	Rate of Flow
Complete failure of a full container	1,000 gallons (largest container size)	east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	Instantaneous
Partial failure of a full container	1 to 1,000 gallons	east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	Gradual to instantaneous
Failure during loading/loading container	1 to 1,000 gallons	east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	Gradual to instantaneous
Container overflow	1 to many gallons	east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	___ gallons per minute



Type of Major Failure [or Potential Event]	Max. Possible Quantity Released	Direction of Discharge Flow (relative to storm drainage ditch)	Rate of Flow
Pipe failure	Up to 1000 gallons	east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	Up to 1 gallon per minute
Leaking pipe or valve packing	Several ounces to several gallons	east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	Gradual to instantaneous
Drain plug removed from rupture basin of day tank and it fails or leaks	Up to 60 gallons	onto concrete floor of building; then onto asphalt and then east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	Gradual to instantaneous
Leak from transformer	Up to 78 gallons	east to storm drainage ditch which flows to Carol Creek; however, there is a spill diversion catch basin between the container and the drainage ditch to catch the discharge before it can enter the storm drainage ditch	Gradual to instantaneous

*Note: The potential spill volumes and rates above are relative to “what could potentially be discharged as a result of each major type of equipment failure, such as tank overflow” (complete or partial), or leakage (from piping, valves, missing drain plugs, etc.).*

## CONTAINMENT AND DIVERSIONARY STRUCTURES- 40 CFR 112.7(c)

- I. Container #1 is a double-walled, Convault tank with interstitial monitoring. The container is located adjacent and exterior to the generator room portion of the building.
- II. Container #2 is a single-walled day tank with a 110% capacity rupture basin. The rupture basin has a screw-type drain plug which is kept screwed in at all times. The tank is located in the generator room portion of the building, which has a concrete floor. There are no floor drains in the building.
- III. Container # 3 is a double-walled container. The container is located on a concrete slab within the fenced area.
- IV. Container # 4 is oil-filled transformer. The transformer is located on a concrete slab within the fenced area.
- V. A spill diversion catch basin has been constructed along the east side of the facility between the oil containers and equipment and the storm drainage ditch. The catch basin was designed to hold a capacity of 1,100 gallons of oil should a instantaneous discharge of the largest container occur. The catch basin is sufficiently impervious so as to allow the oil to be captured and recovered/removed.
- VI. Small amounts of sorbent materials are provided in an emergency spill equipment locker in the building.
- VII. Booms or other barriers are available for the local cleanup contractor.

### *Notes:*

- 1. This is the section of the SPCC Plan where the facility must identify the presence and location of any sorbent materials for readily mitigating any releases and preventing the release from reaching a body of water.*
- 2. With the revised regulations, sorbent materials are not sufficient for instantaneous releases of large quantities. While FAA facilities technically have the option to use "equivalent environmental protection," this option also mandates a contingency plan that follows 40 CFR 109 and a written commitment of personnel, equipment, and materials. Undertaking these things is cost prohibitive for most FAA facilities, when compared to the cost of constructing a spill diversion catch basin.*

## DEMONSTRATION OF PRACTICABILITY - 40 CFR 112.7(d)

Facility management has determined that the use of the containers with integral secondary containment, a spill diversion catch basin, and the readily available equipment to prevent discharge oil from reaching navigable waters is practical and effective at this facility.

*Note: Only use the above sentence if the sentence is true for the specific facility. If the statement is used, a spill contingency plan is not required. If the statement (or a similar statement) is not used, an oil contingency plan following 40 CFR 109 must be developed and there must be a written commitment of personnel, equipment, and materials.*

## INSPECTIONS, TESTS, AND RECORDS - 40 CFR 112.7(e)

- I. The procedures for conducting inspections and tests are provided in Appendix 1 of the SPCC Plan.
- II. The form in Appendix 2 of the plan is used to record the monthly inspections.
- III. Records of the periodic inspections noted throughout the SPCC plan are kept for five years. [See Note below.] Comparison records will be kept for as long as needed in order to allow for appropriate comparisons.

*Note: Be aware that while the revised Federal regulations shorted the records retention timeframe to three years, FAA Order 1050.15A, Paragraph 88 requires that all inspections, testing results, and release monitoring records be maintained either at the facility or the nearest AF office for at least 5 years*

## PERSONNEL, TRAINING, AND SPILL PREVENTION PROCEDURES - 40 CFR 112.7(f)

- I. All oil handling employees are instructed at least annually by management in the operation and maintenance of oil pollution prevention equipment, in the basics of the facility's SPCC Plan, and in applicable pollution control laws and regulations.
- II. The SMO SECM has been designated by management as responsible for oil discharge prevention at this facility.
- III. Instructions and phone numbers regarding the reporting of a spill to the National Response Center and appropriate state and local entities are listed below and have been publicized and posted in the building at the facility.

### a. Notifications are to be made in the following order:

- ∂ **911** (for a major fire, explosion or other similar type situation)  
and/or  
**SMO SECM, Steve Doe** (for all emergencies and any releases of product)
- **National Response Center (NRC), 1-800 -424-8802**  
(for all releases covered under 40 CFR 110, such as cause a sheen upon or discoloration of the surface of the water or adjoining shorelines, etc. In addition, all releases of hazardous substances over CERCLA RQs must also be reported to the NRC.)
- ÷ **Virginia State Department of Environmental Quality, 1-800-468-8892 or 804- 674-2400**

### b. Area Cleanup Contractors

- ∂ Jones Cleanup Contractors, Fernville, VA

703-410-1100

- Smith Cleanup & Removal Inc., Nearby, VA  
703-666-6000

c. Supplies and Equipment

∂

•

SECURITY - 40 CFR 112.7(g)

- I. The facility is surrounded by steel security fencing and the entrance gates are locked when the facility is unattended.
- II. Area lighting is present and located in such a position as to illuminate the area of the ASTs. Consideration was given to discovering spills at night and discouraging pilferage and possible sabotage.
- III. The bulk storage containers located exterior to the building have locking caps on their fill pipes and their drain valves are locked in the closed position when in non-operating status.

TANK TRUCK LOADING / UNLOADING RACKS - 40 CFR 112.7(h)

***Note: Currently there is litigation regarding this section. The issue is whether or not this section only applies to those facilities that have loading/unloading RACKS. One interpretation is that this section only applies to those facilities that have loading/unloading racks. This is consistent with the U.S. Navy interpretation and others. Should a FAA facility have a loading/unloading rack, this section must be included.***

If a facility must have this section, here are proposed wordings:

- I. The facility has a quick drainage system where its loading/unloading area does not flow into a catchment basin or a treatment facility designed to handle discharges.
- II. The facility's containment system is designed to hold at least the maximum capacity of any single compartment of a tank truck loaded or unloaded at the facility.
- III. The facility uses \_\_\_\_\_ [interlocked warning light or physical barrier system; warning sign; wheel chocks; vehicle break interlock system] in the loading/unloading area to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.
- IV. Prior to filling and departure of any tank truck, one must inspect for discharges at the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

V. All fuel transfers are attended and are never left unattended. All transfers of product to (and from) a container are visually tracked by an FAA employee, or designate, to observe any spillage.

VI. All fuel truck loading and unloading procedures meet the minimum requirements of the US DOT Hazardous Materials Regulations.

*Note: All the above statements must be true for the specific facility before using them. The first three are relative to the revised regulations. Statement number V. above includes the requirement in FAA Order 1050.15A, Paragraph 70.b. which states: "All additions of product to the tank shall be visually tracked by an FAA employee, or designate, to observe any spillage." In addition, Chapter 8, paragraph 86.b. states: "...An owner/operator of a facility shall ensure that the transfer operation is monitored constantly to prevent overfilling and spill " Statement number VI. is a restatement of necessary DOT requirements.*

#### FACILITY DRAINAGE - 40 CFR 112.8(b)

I. The facility's drainage from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) have been designed to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. [40 CFR 112.8(b)(3)]

II. The facility's catchment basin is not located in an area subject to periodic flooding. [40 CFR 112.8(b)(3)]

*OR if a facility's drainage from undiked areas has not been designed/engineered to meet Statement I. above, then the following requirement applies:*

I. The final discharge of all ditches inside the facility are equipped with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility. [40 CFR 112.8(b)(4)]

-----  
*If a facility has any diked storage areas:*

I. Drainage from any diked storage areas are restrained by valves (or other means) [EXPLAIN] to prevent a discharge into a drainage system or facility effluent treatment system. [40 CFR 112.8(b)(1)]

II. Valves used for the drainage of diked areas are manual, open-and-close design. [40 CFR 112.8(b)(2)]

III. The facility's drainage flows directly into a watercourse. The facility inspects and drains uncontaminated retained stormwater pursuant to 40 CFR 112.8(c)(3)(ii), (iii), and (iv). [40 CFR 112.8(b)(2)]

## BULK STORAGE CONTAINERS - 40 CFR 112.8(c)

I. Each of the bulk storage containers (Containers #1, #2, and #3), through material and construction, is compatible with the oils they contain and the conditions of storage.

II. Containers #1 and #3 have doubled-walled provide secondary containment with a volume greater than 110 percent. *[Note: If the secondary containment is open to precipitation, a statement needs to be added that the secondary containment has sufficient freeboard to contain precipitation.]*

III. Container #2, a “day tank,” is located inside the building. There are no floor drains in the building and the concrete floor is sufficiently impervious to contain discharged oil. For secondary containment, the doorway has a containment curb. *[Note: The day tank is considered a bulk storage container because it stores oil prior to use and while in use.]*

IV. In addition, to control any potential loading/unloading or catastrophic discharges, the facility has a spill diversion berm/catch basin between the bulk storage containers and the drainage ditch. The spill diversion berm/catch basin is sized to contain the capacity of the largest single container as well as sufficient freeboard to contain precipitation.

V. There are no outside diked areas. *[Note: If a facility has an outside diked area, a facility might use the following: “The facility has an outside diked area. The diked area bypass valve is normally sealed closed. Uncontaminated retained rainwater will only be discharged in accordance with the SPCC regulations and will be done under responsible supervision.”]*

VI. There are no completely buried metal storage containers at this facility.

VII. All bulk storage containers are subject to integrity testing on a regular schedule. Visual inspections are conducted daily/weekly and monthly. Visual inspections are performed according to the procedure located in Appendix 1 and 2 of this SPCC Plan and includes inspections of container supports and foundations. Visual inspection of doubled-walled containers includes the inspection of the interstitial space. In addition, the bulk storage containers are subject to non-destructive shell integrity testing on a regular schedule. All testing will be conducted according to the procedures located in Appendix 1 of this SPCC Plan and all testing results are maintained pursuant to the “Inspections, Testing, and Records” section of this SPCC Plan.

VIII. There are no internal heating coils in the bulk storage containers at this facility.

IX. The location of each bulk storage container has been installed in accordance with good engineering practices to avoid discharges. Each bulk storage container is equipped with a direct-reading level gauge. In addition, each bulk storage container has an alarm device/system:

- Container #1, the 1000 gallon Convault, has high liquid level alarm with an audible signal.
- Container #2, the 60 gallon “day tank,” has a \_\_\_\_\_.
- Container #3, 500 gallon used oil container, has a \_\_\_\_\_.

Vent capacities of all containers are suitable for the fill and withdrawal rates. The liquid level sensing devices are regularly tested to ensure proper operation and all testing results are maintained pursuant to the “Inspections, Testing, and Records” section of this SPCC Plan.

X. There is no effluent treatment system at this facility. *[Note: If a facility has an effluent treatment system: “While there is an effluent treatment system at this facility, there is no pathway for any of the oil to enter the effluent treatment system.”*

XI. The facility promptly corrects any visible discharges which result in a loss of oil from a container, including but not limited to: seams, gaskets, piping, pumps, valves, rivets, and bolts.

XII. The facility promptly removes any accumulations of oil in any secondary containment structure (i.e., secondary wall space, containment curb, spill diversion berm/catch basin, diked area).

XIII. All mobile or portable oil storage containers are positioned to prevent a discharge as described in 40 CFR 112.1(b). *[Note: Container #3 may be considered a portable or mobile oil storage container. As such, it must be positioned in the facility so that should there be a discharge from the container (such as loading/unloading or catastrophic), it is uphill from the spill diversion berm/catch basin and any discharge would go into the spill diversion berm/catch basin. (Or it can be in a diked area, but if the diked area is outside, the facility must address rainwater issues/requirements.)]*

*Notes:*

1. Insure that all the above statements are true for the specific facility before using them. For the most part, the statements above are presented in order as the requirements of 112.8(c).

2. FAA Order 1050.15A, Chapter 8, Paragraph 92 requires ASTs to be tested every ten years. This would be a minimum as good management practices would dictate more frequent inspections as a means to prevent reoccurrence of spills.

3. If a “day tank” and/or other containers are located inside a building that has floor drains (be it a drain to a sewage or storm system), it is highly recommended that the drains be plugged with concrete. Then one can use statement X. above. If closing up all the drains is not possible or not appropriate, then a discussion needs to be included here about the effluent systems, drainage systems, or systems that could potentially receive a discharge—such as where it would flow, how the facility will prevent any oil from getting into the system, what the facility would do if oil did get into the system, etc.

#### FACILITY TRANSFER OPERATIONS, PUMPING, and FACILITY PROCESS - 40 CFR 112.8(d)

I. No buried piping is used in connection with any oil containing containers at this facility.

II. All terminal connections at transfer points are capped or blank-flanged.

III. All terminal connections are marked as to origin when piping is not in service or is in standby service for an extended time.

IV. All pipe supports have been designed to minimize abrasion and corrosion, and allow for expansion and contraction.

V. Visual inspections of all aboveground valves, piping, and appurtenances are conducted daily/weekly and monthly. Visual inspections are performed according to the procedure located in Appendix 1 and 2 of this SPCC Plan and includes assessment of the general conditions of items, such

as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.

VI. The facility uses one or more methods to warn all vehicles entering the facility to ensure that no vehicle endangers oil transfer operations and aboveground piping, if applicable.

*Note: Insure that all the above statements are true for the specific facility before using them. For the most part, the statements above are presented in order as the requirements of 112.8(d), exclusive of the requirements relative to buried piping.*

-----  
***If a facility has any buried piping, then the following statements should be evaluated:***

I. All buried piping that was installed or replaced on or after 8/16/02 has a protective wrapping and coating.

II. All buried piping is cathodically protected or otherwise protected (such as by compliance with Federal/State corrosion protection requirements in underground storage containers regulations).

III. Whenever any section of buried line is exposed (for any reason), it is carefully inspected for deterioration. Additional examination and corrective action is taken if corrosion damage is found.

IV. Integrity testing and leak testing was conducted on all buried piping at the time of installation. In addition, integrity testing and leaking testing is conducted on all buried piping when it is modified, relocated, or replaced.

*Note: Insure that all the above statements are true for the specific facility before using them. For the most part, the statements above are presented in order as the requirements of 112.8(d) relative to buried piping.*



Certification of Applicability of an EPA Facility Response Plan (FRP) - 40 CFR 112.20(e)  
[Also known as the "Certification of Substantial Harm Determination Form" ]

**If there is a "yes" answer to one or more of the five questions below,  
then an EPA FRP Plan is required.**

Facility Name ASR Facility, NAS International Airport (IAN)

Facility Address NAS International Airport, Herndon, VA

Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? Yes \_\_\_\_\_ No 3

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage container plus sufficient freeboard to allow for precipitation within any aboveground oil storage container area? Yes \_\_\_\_\_ No 3

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? Yes \_\_\_\_\_ No 3

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR 112 or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake? Yes \_\_\_\_\_ No 3

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years? Yes \_\_\_\_\_ No 3

CERTIFICATION

I certify under penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature Steve Doe Date August 3, 2004

Name (type or print) Steve Doe

Title SPCC Coordinator and SMO SECM

### Procedures for Conducting Inspections and Tests

#### Inspections:

- I. Daily/weekly visual inspections will consist of a walkthrough of the facility property to check for container and piping damage, deterioration, or leakage. These inspections shall also ensure all valves and caps are securely closed and that all level indicators and container alarms are operating properly.
- II. Once a month, a complete walkthrough of the facility will be made and the facility inspection checklist form will be filled out, signed, and maintained with the facility SPCC Plan.

#### *Notes:*

1. *Procedures are required to be written as exemplified above.*
2. *The choice of “daily”, “weekly”, or any other timeframe must be reasonable; However, it must also take into account the type of facility, the aggregate oil capacity present, and the age and history of equipment.*
3. *Visual inspection of doubled-walled containers includes the inspection of the interstitial space.*

#### Tests:

- I. All aboveground bulk storage containers will undergo periodic integrity testing, in addition to the routine visual inspections. The integrity testing will be conducted according to written industry procedures, such American Petroleum Institute (API) standards, American National Standards Institute (ANSI) standards, and engineering specifications and practices.
- II. The periodic integrity testing will be conducted on the following schedule:
  - (a) every 10 years for bulk storage containers; and
  - (b) whenever material repairs are made on a bulk storage container.

#### *Notes:*

1. *Procedures are required to be written. That is the reason for the above statements.*
2. *Regarding the “10 year’s in II.(a) above, industry standards or good manufacturing practices may dictate more frequent testing or testing may be relative to size or other concerns.*
3. *Regarding the “10 years” in II.(a) above, it should also be noted that FAA Order 1050.15A, Chapter 8, Paragraph 92 requires ASTs to be tested every ten years.*

Sample FAA ASR Facility SPCC Plan - Appendix 2

Facility Name & Location: ASR Facility, NAS International Airport (IAN)

Facility Inspection Checklist

Instructions: This inspection record is for the periodic inspections, which are conducted at the facility. Place an X in the appropriate box for each item. If any responses require elaboration, do so in the Descriptions and Comments space provided. Further descriptions or comments should be attached on a separate sheet of paper is necessary.

	<u>YES</u>	<u>NO</u>	<u>DESCRIPTIONS/COMMENTS</u>
Container surfaces show signs of leakage _____		<u>  X  </u>	
Interstitial spaces show signs of leakage	<u>      </u>	<u>  X  </u>	_____
Ground or floor around container(s) show signs of staining	<u>      </u>	<u>  X  </u>	_____
Container(s) show signs of damage, rust or deterioration	<u>      </u>	<u>  X  </u>	_____
Bolts, rivets or seams show signs of damage, rust or deterioration	<u>      </u>	<u>  X  </u>	_____
Container supports are deteriorated or buckled _____		<u>  X  </u>	
Level gauges or alarms are inoperative	<u>      </u>	<u>  X  </u>	_____
Vents are obstructed	<u>      </u>	<u>  X  </u>	_____
Valve seals or gaskets are leaking	<u>      </u>	<u>  X  </u>	_____
Pipelines show signs of leakage	<u>      </u>	<u>  X  </u>	_____
Pipelines or supports are damaged or deteriorated	<u>      </u>	<u>  X  </u>	_____
Fencing, gate or lighting in non-functional	<u>      </u>	<u>  X  </u>	_____

Remarks: \_\_\_\_\_  
\_\_\_\_\_

Signature:   Steve Doe   Date:   7/7/04